### **Black Start Base Formula Rate**

MIC

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**IMM** 



# **Black Start Compensation**

- Black start compensation
  - Capital cost recovery rate including CRF rate
  - Base formula rate
- CRF rate
  - Provides for full recovery of investment costs with a return over a defined period
- Base formula rate
  - After completion of CRF period
  - Standalone option

# **Capital Cost Recovery Rate**

- (FERC-approved rate) + (Incremental Black Start Capital Costs \* CRF) + (Fuel Assurance Capital Costs \* CRF)
- "FERC-approved rate" is the Black Start Unit's current FERC-approved recovery of costs to provide Black Start Service, if applicable. To the extent that a Black Start Unit owner is currently recovering black start costs pursuant to a FERC-approved rate, that cost recovery will be included as a formulaic component for calculating the Black Start Unit's annual revenue requirement pursuant to this section 18. However, under no circumstances will PJM or the Black Start Unit owner restructure or modify that existing FERC-approved rate without FERC approval."

<sup>\*</sup>Source PJM Tariff Section 6A <a href="https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pim.com/directory/etariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariffs/23Tariffs/2

#### **Base Formula Rate**

- (Net CONE \* Black Start Unit Capacity \* X Factor) \*(Z Factor)
  - X Factor is .01 for Hydro units
  - X Factor is .02 for CT units and fuel assured hydro units
  - Z Factor is a 10 percent adder for non fuel assured units
  - Z Factor is a 20 percent adder for fuel assured units

<sup>\*</sup>Source PJM Tariff Section 6A <a href="https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pjm.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariff/MasterTariffs/23TariffSections/4406.pdf">https://pim.com/directory/etariffs/23TariffSections/4406.pdf</a>. <a href="https://pim.com/directory/etariffs/23Tariffs/2

## **Base Formula Rate Changes**

- PJM proposes to change base formula rate
  - Set Net CONE equal to average of last five years RTO Net CONE
  - PJM's rationale: Net CONE value decreased
  - Note: RTO Net CONE cannot be earned by an actual resource because it is based on RTO average LMP and not an actual locational price.

## **Base Formula Rate Changes**

- No logical reason to pay black start resources a base formula rate based on Net CONE value for a CT
- Net CONE for a new entrant CT has nothing to do with the costs of providing black start service
- CRF revenues provide for 100 percent return of and on all debt and equity investments over period shorter than life of black start resource
- Base formula rate is about 20 percent of CRF revenues

### What is the Question?

- What is a rational, cost-based approach to paying black start resources after completing CRF recovery period?
- What is a rational incentive payment to black start resources after completing CRF recovery period?
- Should there be a default rate option for base formula rate, in addition to a unit specific option?

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